

Listing of claims

1-24 **(Cancelled)**.

25. **(Previously presented)** A method of producing a liquid spray composition for administration of a bioactive material to the nasal cavity consisting essentially of:

- a) a pharmacologically acceptable non aqueous liquid carrier selected from the group consisting of diglycerides, triglycerides and mixtures thereof in which said bioactive material is directly insoluble,
- b) a pharmacologically acceptable water insoluble ester of a water soluble acid soluble in said carrier,
- c) a pharmacologically acceptable water soluble glycol soluble in said ester, comprising from about 1 to about 5 wt.% of the total composition.
- d) a pharmacologically acceptable water soluble bio-active material soluble in said glycol but directly insoluble in said carrier said spray being non-aqueous tasteless, odorless,

which consists essentially of the sequential steps of dissolving the bio-active material of (d) in a glycol of (c), dissolving said solution of (d) in (c) in an ester of (b) and dissolving said solution of {(d) in (c) in (b)} in a carrier of (a).

26. **(Previously presented)** The method of claim 25 wherein the carrier is selected from the group consisting of a medium chain diglyceride, a medium chain triglyceride and mixtures of said glycerides.

27. **(Previously presented)** The method of claim 26 wherein the carrier is selected from the group consisting of a medium chain ethylene diglyceride, medium chain propylene diglyceride, a medium chain propylene triglyceride and mixtures of said glycerides,

28. **(Previously presented)** The method of claim 27 wherein the glyceride moieties are selected from the group consisting of caprylic and capric glycerides.

29. **(Presently amended)** The composition produced by the method of claim [1 comprising] 25 consisting essentially of

- a) from about 50-about 90 wt.% of the carrier,
- b) from about 10-about 40 wt% of the water insoluble ester,
- c) from about 1-about 5 wt.% of the water soluble glycol ,
- d) from about 0.01-about 2 wt.% of the bio-active material.

30. (**Presently amended**) The composition of claim 29 [comprising] consisting essentially of

- a) from about 60 about 90 wt.% of the carrier,
- b) from about 10 about 20 wt% of the water insoluble ester,
- c) from about 1 to about 3 wt.% of the water soluble glycol,
- d) from about 0.01 to about 2 wt.% of the bio-active material.

31. **(Previously presented)** The composition of claim 30 wherein the glycol is a C₃ to C₈ glycol.

32. **(Previously presented)** The composition of claim 31 wherein the glycol is selected from the group consisting of polyethylene glycol and propylene glycol.

33. **(Previously presented)** The composition of claim 29 wherein the ester is a lactate ester.

34. **(Previously presented)** The composition of claim 33 wherein the lactate ester is a C₁₂ - C₁₅ alkyl lactate

35. **(Previously presented)** The composition of claim 34 wherein the alkyl group is selected from the group consisting of cetyl, lauryl, isostearyl and myristyl and mixtures thereof.

36. **(Previously presented)** The composition of claim 29 wherein the bio-active material is selected from the group consisting of decongestants, antihistamines, antitussives, anticholinergics, steroids, antibiotics, analgesics, antispasmodics, bronchodilators, vitamins, hormones, antihypertensives and antimicrobials.
37. **(Previously presented)** The composition of claim 29 wherein the bio-active material is a decongestant.
38. **(Previously presented)** The composition of claim 37 wherein the bio-active material is selected from the group consisting of oxymetazoline, xylometazoline, naphazoline, phenylephrine, ephedrine in water soluble form.
39. **(Previously presented)** The composition of claim 38 wherein the bio-active material is in the form of a pharmacologically acceptable salt.
40. **(Previously presented)** A method of administering a bio-active material to a subject in need of same which consists essentially of spraying a pharmacologically effective amount of a composition of claim 29 into the nasal cavity of said subject.
41. **(Previously presented)** The method of claim 40, wherein the bio-active material is selected from the group consisting of decongestants, antihistamines, antitussives, anticholinergics, steroids, analgesics, antibiotics, antispasmodics, bronchodilators, vitamins, hormones, antihypertensives and antimicrobials.
42. **(Previously presented)** The method of claim 41, wherein the bio-active material is a decongestant.
43. **(Previously presented)** The method of claim 42, wherein the bio-active material is selected from the group consisting of oxymetazoline, xylometazoline, naphazoline, phenylephrine, ephedrine in water soluble form.